

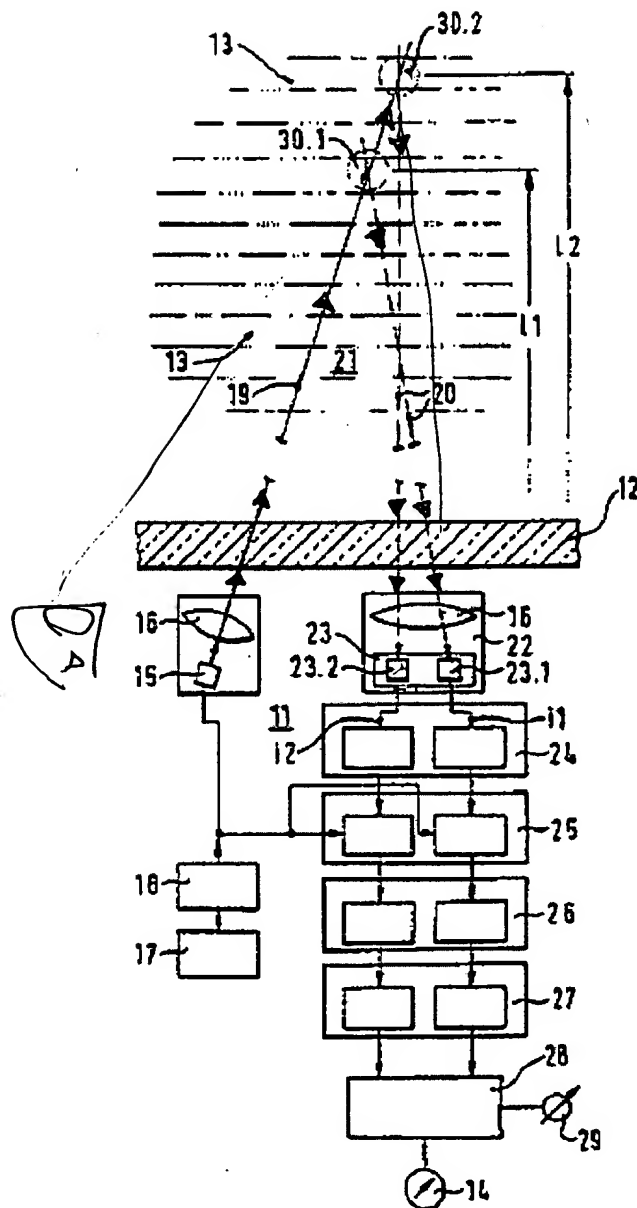
Optronic visual range indicator

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Abstract of DE4326170

A visual range indicator (11) which is more cost effective than measurement of propagation time measures the intensity (i) of the reflection (20) of a volumetric element (30), provided with scattering particles (13), at the point of intersection of the emission direction of a radiation source (15) with the receiving characteristic of a receiver (22) at a distance (1), prescribed by the design, in front of the arrangement of radiation source (15) and receiver (22). Since the paths of emission and reflection and the transmitter power are constant, because of the two-fold damping path the reception intensity (i) drops with rising turbidity (cloudiness, opacity) of the atmosphere (air space 21) despite an increased scattering effect of the volumetric element (30) detected. The damping component of a polluted disc (12) upstream of the transmitting and receiving arrangement is eliminated by forming the mutual ratio of the intensities (i1, i2) of reflection of two volumetric elements (30.1, 30.2) in the evaluation circuit (28) which are mutually offset with respect to distance.



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